



## Complete Summary

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### TITLE

Standardized developmental and behavioral screening: proportion of children whose health care provider administered a parent-completed standardized developmental and behavioral screening tool.

### SOURCE(S)

Child and Adolescent Health Measurement Initiative (CAHMI). Bethell C, Peck Reuland C, Walker C, Brockwood K, Latzke B, Read D. In-office administration of the promoting healthy development survey - reduced-item version. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 79 p.

Child and Adolescent Health Measurement Initiative (CAHMI). Promoting healthy development survey - PLUS (PHDS-PLUS). Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; various p.

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 2001. 16 p.

Reuland CP, Bethell C. Measuring and evaluating developmental services: strategies and lessons from the ABCD II consortium states. Washington (DC): National Academy for State Health Policy (NASHP); 2006 Dec. 107 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Patient Experience

## Brief Abstract

### DESCRIPTION

This measure is used to assess whether the child's health care provider administered a parent-completed, standardized developmental and behavioral screening tool. It is recommended that developmental surveillance be incorporated at every well-child preventive care visit. Any concerns raised during surveillance should be promptly addressed with standardized developmental screening tests. In addition, screening tests should be administered regularly at the 9-, 18-, and 30-month visits.

## **RATIONALE**

Research shows that the most reliable and valid approach to identify children at risk for delays is to implement a standardized developmental screening tool. Integral to assuring whether children are being screened in this way is the use of standardized measures to track the current level of screening and to monitor implementation efforts over time. No standardized and validated methods are available to health systems for this purpose. Some health systems examine medical charts for evidence of standardized screening of children. However, it is not known whether this data source is reliable or valid for measurement purposes due to variations in whether and how care providers document their screening activities, including whether or not completed tools are included in the chart. Early identification of developmental disorders is critical to the well-being of children and their families. Early identification should lead to further evaluation, diagnosis, and treatment. Surveillance can be useful for determining appropriate referrals, providing patient education and family-centered care in support of healthy development, and monitoring the effects of developmental health promotion through early intervention and therapy.

Few standardized quality measures are available that provide specific information about preventive health care for young children, especially on aspects of care for which parents and families are a reliable source of information about the quality of their child's health care. A majority of the measures currently used provide information about whether children come in for well-child visits (access to care measures) or are based on medical chart reviews which are not accurate for the specific level of information obtained in the Promoting Healthy Development Survey (PHDS).

## **PRIMARY CLINICAL COMPONENT**

Developmental and behavioral screening

## **DENOMINATOR DESCRIPTION**

Children age 3 months to 48 months who received a well-child visit in the last 12 months and whose parents responded to all three "Standardized Developmental and Behavioral Screening" items on the Promoting Healthy Development Survey (PHDS)

## **NUMERATOR DESCRIPTION**

Children whose parents responded "Yes" to all three items (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

## Evidence Supporting the Measure

### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- Focus groups
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

### NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening.](#)

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Overall poor quality for the performance measured  
Use of this measure to improve performance

### EVIDENCE SUPPORTING NEED FOR THE MEASURE

American Academy of Pediatrics policy statement on identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. Elk Grove Village (IL): American Academy of Pediatrics; 2006 Jul.

Bethell C, Peck C, Abrams M, Halfon N, Sareen H, Scott Collins K. Partnering with parents to promote the healthy development of young children enrolled in Medicaid: results from a survey assessing the quality of preventive and developmental services for young children enrolled in Medicaid in three states. New York (NY): Commonwealth Fund; 2002 Sep. 53 p.

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. Pediatrics 2001 May;107(5):1084-94. [PubMed](#)

Council on Children With Disabilities, Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee, Medical Home Initiatives for Children With Special Needs Project Advisory. Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. Pediatrics 2006 Jul;118(1):405-20. [45 references] [PubMed](#)

Hagan JF, Shaw JS, Duncan P, editor(s). Bright futures: guidelines for health supervision of infants, children and adolescents. 3rd ed. Arlington (VA): National Center for Education in Maternal and Child Health; 2007.

Measure of standardized developmental and behavioral screening using parent surveys. [Web site]. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI);

Reuland CP, Bethell C. Measuring and evaluating developmental services: strategies and lessons from the ABCD II consortium states. Washington (DC): National Academy for State Health Policy (NASHP); 2006 Dec. 107 p.

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Collaborative inter-organizational quality improvement  
External oversight/Medicaid  
Internal quality improvement  
National reporting  
Quality of care research

## Application of Measure in its Current Use

### CARE SETTING

Ambulatory Care

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses  
Nurses  
Physician Assistants  
Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

### TARGET POPULATION AGE

Children age 3 months to 48 months

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

### Characteristics of the Primary Clinical Component

#### **INCIDENCE/PREVALENCE**

Unspecified

#### **ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

#### **BURDEN OF ILLNESS**

Unspecified

#### **UTILIZATION**

Unspecified

#### **COSTS**

Unspecified

### Institute of Medicine National Healthcare Quality Report Categories

#### **IOM CARE NEED**

Staying Healthy

#### **IOM DOMAIN**

Effectiveness  
Patient-centeredness

### Data Collection for the Measure

#### **CASE FINDING**

Users of care only

#### **DESCRIPTION OF CASE FINDING**

Children age 3 months to 48 months who received a well-child visit in the last 12 months

#### **DENOMINATOR SAMPLING FRAME**

Patients associated with provider

## **DENOMINATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Children age 3 months to 48 months who received a well-child visit in the last 12 months and whose parents responded to all three "Standardized Developmental and Behavioral Screening" items on the Promoting Healthy Development Survey (PHDS)

### **Exclusions**

Unspecified

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

## **DENOMINATOR (INDEX) EVENT**

Encounter

Patient Characteristic

## **DENOMINATOR TIME WINDOW**

Time window precedes index event

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Children whose parents responded "Yes" to all three items

From the responses, a composite measure score is calculated\* in which a higher score is associated with better quality.

**\*Note:** Scoring process:

1. Individual items are recoded so that "Yes" responses are recoded into 100 and "No" responses are recoded into 0.
2. Children for whom the parent responded "Yes" to all three items are recoded to 100. Children whose parent responded "No" to one or more items are recoded to 0.

### **Exclusions**

Unspecified

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

**NUMERATOR TIME WINDOW**

Encounter or point in time

**DATA SOURCE**

Patient survey

**LEVEL OF DETERMINATION OF QUALITY**

Individual Case

**PRE-EXISTING INSTRUMENT USED**

Unspecified

**Computation of the Measure****SCORING**

Non-weighted Score/Composite/Scale

**INTERPRETATION OF SCORE**

Better quality is associated with a higher score

**ALLOWANCE FOR PATIENT FACTORS**

Analysis by high-risk subgroup (stratification on vulnerable populations)  
Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

**DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS**

Although no stratification is required, the Promoting Healthy Development Survey (PHDS) includes a number of variables that allow for stratification of the findings by possible vulnerability:

- Child demographic characteristics (e.g., the child's age, race)
- Child health and descriptive characteristics (e.g., children at high risk for developmental, behavioral or social delays, special health care needs)

**STANDARD OF COMPARISON**

External comparison at a point in time  
External comparison of time trends  
Internal time comparison

### EXTENT OF MEASURE TESTING

#### Testing in English

- Overall, N=23 interviews were conducted with parents whose children received care in sites that use a standardized developmental and behavioral screening (SDBS) tool at specific visits.
- The interviews were conducted with N=15 parents who completed an SDBS (9 completed the ASQ, 6 completed the PEDS) and N=8 parents who did not complete an SDBS tool. Participating parents reported about care provided to children ages 3 months old to 36 months old.
- The items have been formally added to the Promoting Healthy Development Survey (PHDS) and will be implemented by all future users of the PHDS.
- The items have also been added to the 2007 National Survey of Children's Health. Cognitive testing was done prior to the NSCH being conducted which confirmed the validity and reliability.

#### Testing in Spanish

- Overall, N=6 interviews were conducted with parents whose children received well-child care in the test site that uses an SDBS tool at specific visits.
- The interviews were conducted with N=4 parents who completed an SDBS tool (the test site uses the Ages and Stages Questionnaire, ASQ) and N=2 who did not complete an SDBS tool. Participating parents reported about care provided to children ages 3 months old to 36 months old.
- The items have also been added to the 2007 National Survey of Children's Health. Cognitive testing was done prior to the NSCH being conducted which confirmed the validity and reliability.

### EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Reuland CP, Bethell C. Measure of whether a parent-completed standardized developmental and behavioral screening (SDBS) tool was administered: users tip sheet. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 2006. 6 p.

Reuland CP, Bethell C. Measure of whether standardized development and behavioral screening using parent-completed tools occurred: summary report of CAHMI the recommended items, development and testing of the items and future steps. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 2006 Jun. 15 p.

Reuland CP, Bethell C. Measuring and evaluating developmental services: strategies and lessons from the ABCD II consortium states. Washington (DC): National Academy for State Health Policy (NASHP); 2006 Dec. 107 p.



## Identifying Information

### ORIGINAL TITLE

Administration of a standardized developmental and behavioral screening (SDBS) tool.

### MEASURE COLLECTION

[Promoting Healthy Development Survey \(PHDS\)](#)

### MEASURE SET NAME

[Administration of a Standardized Developmental and Behavioral Screening \(SDBS\) Tool](#)

### DEVELOPER

Child and Adolescent Health Measurement Initiative

### FUNDING SOURCE(S)

The Commonwealth Fund

### COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Christina Bethell, PhD, MBA, MPH; Colleen Reuland, MS; Brooke Latzke, BS

### FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

None

### ENDORSER

National Quality Forum

### ADAPTATION

Measure was not adapted from another source.

### RELEASE DATE

2001 Jan

### REVISION DATE

2006 Dec

### MEASURE STATUS

This is the current release of the measure.

## **SOURCE(S)**

Child and Adolescent Health Measurement Initiative (CAHMI). Bethell C, Peck Reuland C, Walker C, Brockwood K, Latzke B, Read D. In-office administration of the promoting healthy development survey - reduced-item version. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 79 p.

Child and Adolescent Health Measurement Initiative (CAHMI). Promoting healthy development survey - PLUS (PHDS-PLUS). Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; various p.

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 2001. 16 p.

Reuland CP, Bethell C. Measuring and evaluating developmental services: strategies and lessons from the ABCD II consortium states. Washington (DC): National Academy for State Health Policy (NASHP); 2006 Dec. 107 p.

## **MEASURE AVAILABILITY**

The individual measure, "Administration of a Standardized Developmental and Behavioral Screening (SDBS) Tool," is published in "Promoting Healthy Development Survey (mail version)," "In-office Administration of the Promoting Healthy Development Survey - Reduced-item Version (office version)," and "Promoting Healthy Development Survey - PLUS (PHDS-PLUS) (telephone version)." This survey is available from the [Child and Adolescent Health Measurement Initiative \(CAHMI\) Web site](#).

For further information, please contact the Child and Adolescent Health Measurement Initiative (CAHMI) at: 707 SW Gaines Street, Portland, OR 97239-3098; Phone: 503-494-1930; Fax: 503-494-2473; Web site: [www.cahmi.org](http://www.cahmi.org).

## **COMPANION DOCUMENTS**

The following are available:

- Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey: implementation guidelines. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative, Oregon Health & Science University; 179 p. This document is available in Portable Document Format (PDF) from the [Child and Adolescent Health Measurement Initiative \(CAHMI\) Web site](#).
- Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey - PLUS: implementation guidelines. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative, Oregon Health & Science University; 320 p. This document is available in PDF from [CAHMI Web site](#).

## **NQMC STATUS**

This NQMC summary was completed by ECRI Institute on November 28, 2007.  
The information was verified by the measure developer on January 3, 2008.

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